Original Article

A Survey of the Nature and Perceived Impact of Quality Improvement Activities in Pain Management

Sandra Ward, PhD, RN, Marilee Donovan, PhD, RN, and Mitchell B. Max, MD
University of Wisconsin-Madison (S.W.) School of Nursing, Madison, Wisconsin; Kaiser Permanente (M.D.), Clackamas, Oregon, and Pain and Neurosensory Mechanisms Branch (M.B.M.) National Institute of Dental Research, National Institutes of Health, Bethesda, Maryland, USA

Abstract
We surveyed members of the American Pain Society (APS) to determine if they were engaged in quality assurance or improvement (QA/I) activities. If so, we queried them about the characteristics of these activities and their perceptions of whether their data appear to show improvements, decrements, or no change in pain outcomes. Of the 222 respondents from at least 180 institutions, 201 (91%) reported that their institutions had a continuous improvement program. One hundred forty-three respondents reported having data on at least one of six pain outcomes at two points in time. The majority reported that their data revealed improvements in outcomes. A large number, however, had not collected data on important outcomes, such as pain intensity and patient functioning. Many APS members are collecting longitudinal data, and interpreting the data as revealing improvements in outcomes. There is a need for rigorously controlled assessment of the effects of QA/I programs on pain outcomes. J Pain Symptom Manage 1998;15:365–373. © *U.S. Cancer Pain Relief Committee, 1998.*

Key Words
QA Standards, pain, outcomes

Introduction

The American Pain Society (APS)[1,2] has recommended that quality assurance and improvement (QA/I) programs be implemented to institutionalize pain management activities and thereby improve pain outcomes for patients. Similarly, the guidelines on acute and cancer pain issued by the Agency for Health Care Policy and Research call for institutionalizing a commitment to pain management.[3,4] To date, however, published reports of the results of such activities leave open the possibility that QA/I efforts do not lead to improved outcomes, at least over relatively short periods of time.[5,6] These published reports, however, do not reflect the full range of QA/I efforts that are occurring around the country.

In 1991, the APS Committee on Quality Assurance Standards published a description of

Address reprint requests to: Sandra Ward, PhD, RN, University of Wisconsin-Madison, School of Nursing, K6/348, 600 Highland Avenue, Madison, WI 53792.

Preliminary data from this paper were presented at the 15th Scientific Meeting of the American Pain Society, Washington, DC; November 1996.

Accepted for publication: August 4, 1997.

0885-3924/98/$19.00
PII S0885-3924(98)00004-9

components thought to be necessary to institutionalize appropriate pain management. Those components, or elements, were set forth as five standards:

1. Recognize and treat pain promptly.
2. Make information about analgesics readily available.
3. Promise patients attentive analgesic care.
4. Define explicit policies for use of advanced analgesic technologies.
5. Monitor adherence to standards.

Reports of efforts to implement these standards and measure the impact of such efforts have revealed only minimal success in effecting significant change. These reports describe either cross-sectional (benchmarking) or longitudinal studies, and reveal that patients report high levels of satisfaction with clinicians' efforts to manage pain while simultaneously reporting high levels of pain.[5–8] Further, although successes have been reported in increasing patient satisfaction and improving nurses' knowledge and attitudes, pain intensity scores remain high.[6] If, as Miaskowski argues,[9] the "true" outcome measure of interest is pain intensity, then neither of the longitudinal reports published to date indicates marked success.[5,6] The data, across time and across institutions, are remarkably consistent: on 0–10 scales, worst pain is usually about 7 and pain "now" is usually about 5. Unfortunately, these data support the recently expressed opinion that no published reports regarding QA/I efforts toward improving outcomes in *any* clinical problem, not only pain, have shown those efforts to be successful.[10]

We would suggest, however, that available reports come from large health-care centers, are based on data over relatively short periods of time, and reflect only a very small snapshot of activities going on around the country, because most groups do not publish the results of their QA/I efforts. Furthermore, in contrast to findings related to institution-wide efforts, substantial improvements have been seen in targeted clinical units.[11] To reveal a different perspective on the way that QI programs are being used in the care of persons in pain, we conducted a survey of APS members to ascertain the extent to which they are involved in QA/I teams, to describe the kinds of activities in which the teams engage, and to determine their perceptions of whether their data reflect improvements, decrements, or no change in important pain outcomes.

Methods

Subjects

A questionnaire was sent as part of a larger mailing of materials to all members of the APS, including regular, retired, student, corporate and complimentary members. Of the 2839 questionnaires so distributed, 222 were returned.

Instrument

A 26-item questionnaire was developed by the investigators and reviewed by members of the APS Quality of Care Committee. Items were written to cover areas of practice that are addressed by the APS Quality Assurance Standards for the Relief of Acute Pain and Cancer Pain.[1] Twenty-five of the items were structured with a limited number of response options, but included "other" as a response option so that respondents could describe activities or findings that were not subsumed by the other categories. These items sought information about the type of agency/institution in which the respondent practiced, kinds of QA/I activities that had been initiated, types of outcome data that had been collected, and whether that data indicated improvement, worsening, or no change in pain outcomes. Participants were asked to respond to items with respect to QA/I efforts that had taken place within the past 5 years. The last item on the questionnaire was open-ended ("Are there any other comments about QA/I efforts that we haven't asked about?").

Before use in this study, the questionnaire was pilot tested with APS members of the QA/I Task Force and with clinicians who were not part of the Task Force. Several rounds of feedback and revision were conducted, resulting in the final form of the instrument (Appendix A).

Procedure

The questionnaire and instructions for completion were mailed to members of APS in February, 1996. The instructions included a re-

quest that the questionnaire be discarded if the recipient was not directly involved in QA/I activities. Respondents were assured that no institutions would be identified by name in any oral or written reports. The instructions did not include information about the deadline by which time questionnaires were due back, but none was received after July 1996.

Results

Table 1 describes the 222 respondents with respect to discipline and practice setting. The majority were physicians, nurses, or psychologists. Their practice settings were diverse, but most were hospitals (46%) or pain clinics (24%). At least 180 separate institutions are represented by the 222 respondents. This is a conservative estimate because we checked for duplication by comparing respondents' cities and institutions and assumed overlap when this information was not available ($N = 27$). In 15 instances, persons from different areas of the same institution responded (for example, one person from a pain clinic and one from a cancer center).

The length of time respondents had been involved in QA/I efforts in their present institution ranged from 1 to 328 months, with a mean (SD) of 43 (43.4) months and a median of 30 months, omitting one outlier who reported 760 months of involvement. The vast majority of respondents ($N = 201$, 91%) reported that their institutions had a formal ongoing continuous improvement program, and most ($N = 183$, 82%) reported that a multidisciplinary team was charged with improving pain management. When asked to indicate who was on the team, the respondents reported the following: nursing (86%), anesthesia (81%), psychology (60%), pharmacy (56%), physical therapy/occupational therapy (51%), administration (50%), medical oncology (34%), internal medicine (30%), surgery (28%), social work (28%), psychiatry (25%), chaplaincy (15%), patients (14%), and pediatric clinicians (13%).

Table 1
Respondents' Discipline and Practice Setting ($N = 222$)

	N	%
Discipline		
Medicine	95	43
Nursing	64	29
Psychology	41	18
Social work	2	1
Other	18	8
Missing data	2	1
Practice setting		
Hospital	103	46
Pain clinic	55	25
Outpatient clinic	21	10
Private practice	10	5
Hospice	7	3
Multiple answers	17	8
Other	8	4

Of the 201 respondents who reported having a team, 129 (64%) did not answer an item asking who led the team. Of the 72 who provided an answer, 32 (44%) indicated that the team was led by someone from anesthesia, and 8 (11%) indicated leadership by nursing. No other discipline was indicated as having leadership by more than 5% of respondents.

The types of pain addressed by QA/I activities included chronic non-cancer (75%), cancer (72%), postoperative (69%), acute procedural (52%), and trauma (37%). Small percentages of respondents indicated that quality improvement efforts focused on special populations: children (14%), elderly (10%), substance abusers (7%), non–English-speaking patients (5%), and others (15%).

Respondents were asked, "Did your institution/agency adopt a standardized method of documenting pain intensity?" The vast majority ($N = 191$, 86%) answered yes. The most commonly adopted method was a numeric rating scale (NRS) (67%). Other methods included visual analogue scales (VAS) (35%), verbal rating scales (VRS) (24%), FACES (26%), and other (7%). These percentages sum to well over 100, revealing that some respondents indicated the use of more than one method. Examination of how many "standardized" methods were used by each respondent's institution revealed that 96 (43%) of respondents reported one method, 50 (23%) reported two, 35 (16%) reported three, 12 (5%) reported four, and one person reported that all five methods (NRS, VAS, VRS, FACES, and other) had been adopted as the standard way to assess pain.

Table 2 describes the number and percent of respondents who indicated that various guidelines, protocols, policies, or procedures had been developed. The most common activity ($N = 165$, 74%) was the development of procedures regarding assessing and documenting

Table 2
Number (percent) of Respondents Reporting That Various Policies or Procedures Had Been Implemented in Their Setting (N = 222)

Policy/procedure	N	%
Assessment & documentation procedure	165	74%
Assessment policy	146	66%
PCA procedures	138	62%
Treatment procedures	108	49%
New documentation forms	91	41%
Revised documentation forms	92	41%
Other	23	10%

PCA, patient-controlled analgesia.

pain, followed closely by development of an assessment policy (66%) and development of a PCA procedure (62%). Handwritten responses indicated that "other" activities included producing a patient education booklet, establishing a Pain Advisory Committee, and developing a 6-hour pain management core curriculum for new employees.

Respondents were asked, "Does your institution/agency promise patients that you are committed to pain relief?"; 150 (68%) answered yes. This promise is communicated to patients in a variety of ways, including orally by clinicians (N = 111, 50%), in a patient education booklet (N = 90, 41%), by a posting on a wall (N = 23, 10%), through a patient education video (N = 27, 12%), or by other means (N = 20, 9%).

One hundred fifty-seven (71%) respondents indicated that their institutions had a process for obtaining written feedback from patients about the effectiveness of pain management. A slightly smaller number (N = 143, 64%) indicated having collected such data regarding at least one outcome measure over two points in time to determine if changes had occurred. Table 3 reports the number and percent of respondents who indicated that their data reflected improvement, no change, or decrements with respect to eight outcomes. Very few respondents indicated any negative change, a small number reported no change, and many reported improvements. In addition, it is noteworthy that many respondents reported that multiple outcomes were assessed; 101 (71%) of the respondents indicated having collected data on six or more of the outcomes.

Many respondents indicated that educational programs had been offered to various groups, including nurses (84%), staff physicians (75%), residents/interns/medical students (57%), patients and families (43%), pharmacists (35%), support personnel (28%), and other professional groups (38%). When asked if before and after data had been collected to test the impact of such efforts, 53 (24%) responded affirmatively. Table 4 describes the number and percent of respondents who reported that the data indicated an improvement, no change, or worsening in various facets of clinician knowledge. Findings were similar to the patient outcome data described above; there were no reports of decrements, few reports of no change, and many reports of improvement.

Of the 222 respondents, 46 wrote in response to our last question, "Are there any other comments about QA/I efforts that we haven't asked about?" The only common theme emerging in those responses involved difficulties or barriers to carrying out pain QA/I programs. For example, several respondents commented that surgeons in their institution do not recognize pain as a problem, several commented that regula-

Table 3
Number (percent) of Respondents Reporting Improvement, No Change, or Decrements in Patient Outcomes (N = 143)*

Outcome	Improvement	No change	Decrements	NA**
Pt/fam knowledge or attitudes	63 (44%)	6 (4%)	0 (0%)	74 (52%)
Pain intensity	78 (55%)	28 (20%)	3 (2%)	34 (24%)
Pain relief	88 (62%)	15 (11%)	2 (1%)	38 (27%)
Wait time	40 (28%)	18 (13%)	2 (1%)	83 (58%)
Mobility/function	64 (45%)	11 (8%)	1 (1%)	67 (47%)
Pt satisfaction	94 (66%)	8 (6%)	4 (3%)	37 (26%)
Pt/fam expectations	51 (36%)	9 (6%)	2 (1%)	81 (57%)
Other	17 (12%)	1 (1%)	1 (1%)	124 (87%)

*The data in the table consider only those respondents who reported examining data on at least one of these outcomes at two or more points in time.
**NA, not assessed; Pt, patient; fam, family.

Table 4
Number (percent) of Respondents Reporting Improvements, No Change, or Decrements in Clinician Knowledge or Attitudes (N = 53)

Variable	Improvement	No Change	Decrements	NA
Knowledge/attitudes	28 (53%)	3 (6%)	0 (%)	22 (42%)
Consistency in documentation	22 (42%)	3 (6%)	0 (0%)	28 (53%)
Awareness of resources	20 (38%)	6 (11%)	0 (0%)	27 (51%)
Use of appropriate analgesic dose	20 (38%)	8 (15%)	0 (0%)	25 (48%)

NA = not assessed

tory scrutiny casts a pall over efforts to treat pain, and several mentioned that improvements take much effort over long periods of time.

Discussion

This survey shows that many persons around the country are engaged in QA/I activities related to pain management. Most types of pain are being addressed by a large percentage of respondents, but a distressingly small percentage report that efforts focus on special populations, such as the elderly, substance abusers, or non–English-speaking persons. A lack of attention to special populations is of concern, because these are the very groups who may be at risk for undertreatment of pain.[12] There have been many calls for attention to special populations in research; we need similar attention in QA/I activities.

Most respondents reported being part of a multidisciplinary team charged with improving pain management, a practice that is recognized as integral to achieving institutionalization of pain management.[13] Alternatively, few respondents were able to identify the team leader. At first consideration, such "invisible leadership" would seem to be problematic. Quite simply, if no one knows who the leader is, then how does anything get done? Interestingly, however, when we examined the data to see if pain outcomes varied by whether or not a leader was identified, we found no differences. That is, splitting the data set into those respondents who identified a leader and those who did not revealed no differences in the percentage of respondents reporting improvements in the seven pain outcomes.

Reports about the composition of the team clearly revealed that nursing and anesthesia are the disciplines most commonly found on the team. Relatively few respondents reported the inclusion of patients, a practice that many might want to more seriously consider. Attending to consumers' voices could be useful for a number of reasons, including the alternative perspective they bring to decisions about which survey questions to ask and how to interpret data once they are collected.

Data regarding the high number of "standardized" methods of documenting pain intensity are of concern. In response to the question, "Did your institution adopt a standardized method of documenting pain intensity?", many respondents reported having adopted three, four, or even five methods. Our use of the term "standardized" was meant to refer to a common method of recording pain intensity across an institution, which can provide all clinicians the same frame of reference as they treat patients and document care. Such standardization enhances communication across disciplines and departments, and optimizes consistency of care. Because some respondents reported using up to five standardized methods, we suspect that they must have interpreted the term differently than we intended. Given that the APS guidelines suggest adopting a standardized method of documenting pain intensity, perhaps attention is needed toward clarifying the meaning of the term and the rationale behind the suggestion.

Data regarding perceptions of changes in patient outcomes (Table 3) and clinician knowledge and attitudes (Table 4) can be simultaneously interpreted in both positive and negative lights. On the positive side, many outcomes were seen as having improved by large percentages of respondents. On the negative side, equally large percentages of respondents indicated that they were not addressing important outcomes. For example, 24% of respondents indicated they had not assessed pain severity, an outcome that is arguably the single most important indicator of pain management.

Similarly, 47% revealed they did not assess patient mobility or level of functioning. How can one conduct a meaningful survey of pain outcomes without examining these critical variables? Thus, although the data are cause for some optimism about the impact of QA/I efforts, they also raise concern about lack of attention to important outcome variables.

Limitations of our methods should be considered when interpreting these data. First, although we know the number of questionnaires that were sent (2,839) and the number returned (222), we can not ascertain a meaningful response rate because the questionnaires were sent by the APS office as part of a regular mailing to all members of APS, regardless of whether they work in a practice setting or not. This was done for convenience and to limit costs. Consequently, some members who received a questionnaire could not possibly have been engaged in QA/I activities. APS does not keep records as to whether or not members work in a practice setting. One can conclude only that at least 222 APS members are involved in QA/I efforts. Second, it is possible that we received selective responses from persons whose data revealed improvement, biasing this report toward a favorable assessment of the impact of QA/I activities. Third, without examining the data ourselves, we cannot independently assess the nature of the changes that occurred; rather, the data from this survey reflect respondents' perceptions.

The impression of many of the respondents was that outcomes of pain treatment improved after QI programs were established. Given the spreading use of QI approaches for pain management and the interest of policy makers in improving pain treatment and care of patients with advanced illness, we conclude that rigorously controlled studies of the effect of QI programs on pain outcomes should be high on the research agenda. Finally, the fact that many institutions are not collecting data on relevant outcomes, such as pain intensity, and the fact that many are not addressing the needs of special populations, leads us to conclude that there is clear room for improvement in quality improvement efforts.

References

1. American Pain Society Committee on Quality Assurance Standards. Quality assurance standards for relief of acute pain and cancer pain. In: Bond M, Charlton E, Woolf C, eds. Proceedings on the VI World Congress on Pain. Amsterdam: Elsevier, 1991: 185–189.

2. American Pain Society Quality of Care Committee. Quality improvement guidelines for the treatment of acute pain and cancer pain. JAMA 1995;274: 1874–1880.

3. U.S. Department of Health and Human Services (1994). Management of cancer pain. Clinical practice guideline No. 9. AHCPR publication no. 94-0592. Rockville, MD: Agency for Health Care Policy and Research, U.S. Department of Health and Human Services, Public Health Service.

4. U.S. Department of Health and Human Services. (1992). Acute pain management: Operative or medical procedures and trauma. AHCPR publication no. 92-0032. Rockville, MD: Agency for Health Care Policy and Research, U.S. Department of Health and Human Services, Public Health Service.

5. Ward S, Gordon D. Patient satisfaction and pain severity as outcomes in pain management: a longitudinal view of one setting's experience. J Pain Symptom Manage 1996;11:242–251.

6. Bookbinder M, Coyle N, Kiss M, et al. Implementing national standards for cancer pain management. Program model and evaluation. J Pain Symptom Manage 1996;12:334–347.

7. Miaskowski C, Nichols R, Brody R, Synold T. Assessment of patient satisfaction utilizing the American Pain Society's quality assurance standards on acute and cancer-related pain. J Pain Symptom Manage 1994;9:5–11.

8. Ward S, Gordon D. Application of the American Pain Society quality assurance standards. Pain 1994; 56:299–306.

9. Miaskowski C. Commentary. J Pain Symptom Manage 1996;12:331–333.

10. Blumenthal D, Epstein A. Quality of health care part 6: the role of physicians in the future of quality management. N Engl J Med 1996;335:1328–1331.

11. Dietrick-Gallagher, M, Polomano, R, Carrick, L. Pain as a quality management initiative. J Nurs Care Qual 1994;9:30–42.

12. Cleeland C. Documenting barriers to cancer pain management. In: Chapman CR, Foley KM, eds. Current and emerging issues in cancer pain: research and practice. New York: Raven Press, 1993.

13. Max M. Improving outcomes of analgesic treatment: is education enough? Ann Int Med 1990;113: 885–889.

Appendix A

February, 1996

Dear APS Colleague,

In 1990 the APS Quality Improvement Committee released Quality Assurance Standards for Relief of Acute Pain and Cancer Pain. Since that time, many of you have been engaged in projects to document improvements in various aspects of pain management in your institution/agency/caresetting. Such projects have a number of labels including Quality Assurance, Quality Improvement, or Total Quality Management.

By completing the enclosed survey you will help us document the efforts that APS members have been making toward quality improvement in pain relief. We plan to share the findings from this survey at the APS meeting in Washington DC in November 1996; no institutions will ever be identified in presentations or publications based on this data set. Based on responses to this survey we may write to invite you to join the symposium. Whether we can include all persons who have documented changes in practice will depend on the number who indicate that they have such data.

All of the questions in this survey refer to efforts in the last 5 years.

1. Have you been *directly* involved in a quality improvement process to improve pain management in a care setting?

   _____ yes (1) _____ no (0)

   If "no", you are finished with this survey. Thank you for your time. You may simply discard this survey; you do not need to return it.

   If yes, please continue . . .

2. What is the name of your institution/agency/caresetting?

   _____

3. What type of institution/agency/caresetting is this?

   _____ private practice (1)
   _____ pain clinic (3)
   _____ extended care facility (5)
   _____ hospice (7)
   _____ hospital (2)
   _____ outpatient clinic (4)
   _____ home care (6)
   _____ other; please specify

4. Is there a formal ongoing continuous improvement program in this institution/agency/caresetting?

   _____ yes (1) _____ no (0)

5. Does your institution/agency/caresetting have a multidisciplinary team charged with improving pain management?

   _____ yes (1) _____ no (0)

6. If yes, who is on the team? (Check all that apply.) Also, circle the discipline of the person who leads the team.

   _____ anesthesia (1)
   _____ chaplain (2)
   _____ surgery (3)
   _____ administration (4)
   _____ internal medicine, family practice, primary care (5)
   _____ patient/consumer (6)
   _____ medical oncology (7)
   _____ nursing (8)
   _____ pharmacy (9)
   _____ social work (10)
   _____ psychology (11)
   _____ physical therapy/occupational therapy (12)
   _____ psychiatry (13)
   _____ pediatrics (14)
   _____ other; please specify
   _____

7. Which types of pain have you addressed? (Check all that apply.)

   _____ acute procedural (1)
   _____ postoperative (2)
   _____ cancer (3)
   _____ chronic non-cancer (4)
   _____ trauma (5)

8. Did your institution/agency/caresetting adopt a standardized method of documenting pain intensity?

   _____ yes (1) _____ no (0)

9. If yes, which method did you use? (Check all that apply.)

   _____ numeric rating scale (1)

_____ VAS (2)
_____ verbal rating scale (3)
_____ Faces (4)
_____ Other (5) (please attach a copy)

10. Did you develop any of the following guidelines, protocols, policies or procedures? (check all that apply)

_____ Policy requiring regular assessment of pain (1)
_____ Procedures regarding assessment/documentation of pain (2)
_____ Procedures related to treatment of pain (3)
_____ Procedures related to PCA, Epidural (4)
_____ A new form for documenting pain assessment/treatment (5)
_____ Revision of a form to document pain assessment/treatment (6)
_____ Other; please specify _____

11. Did you focus any QA/I activities on special populations? (check all that apply)

_____ children (1)
_____ elderly (2)
_____ non-English speaking (3)
_____ substance abusers (4)
_____ other; please specify _____

12. Does your institution/agency/caresetting promise patients that you are committed to pain relief?

_____ yes (1) _____ no (0)

13. If yes, how is this done? (check all that apply)

_____ orally, by clinician (1)
_____ in writing in a patient information handout (2)
_____ posting on wall (3)
_____ patient education video (4)
_____ other; please specify _____

14. Do you have a process for obtaining written feedback from patients about the effectiveness of your pain management practices?

_____ yes (1) _____ no (0)

15. Have you collected data on quality of pain management over at least two points in time so that you can determine if changes have occurred?

_____ yes (1) _____ no (0)

16. If yes, would you be interested in sharing your data at a symposium at the APS meeting in Washington DC in 1996?

_____ yes (1) _____ no (0)

17. Have the data shown improvement, no change, or worsening in any of the following areas? (Check one column for each topic.)

	improvement	no change	worsening	not assessed
patient/family knowledge/attitudes	_____	_____	_____	_____
pain intensity	_____	_____	_____	_____
pain relief	_____	_____	_____	_____
time waiting for analgesics	_____	_____	_____	_____
patient mobility/function	_____	_____	_____	_____
patient satisfaction	_____	_____	_____	_____
patient/family expectations	_____	_____	_____	_____
other; please specify _____	_____	_____	_____	_____

18. Have you provided clinicians with easy access to information about pain management at the site of care delivery? (E.g., equianalgesic charts, computer program to convert from one opiate to another, books, etc.)

_____ yes (1) _____ no (0)

Please specify: _____

19. Have you conducted educational programs for any of the following groups? (Check all that apply.)

_____ staff physicians (1)
_____ nurses (2)
_____ other professional groups (5)
_____ support personnel (6)

_____ residents/interns/medical students (3)
_____ pharmacists (4)
_____ patients/families (7)
_____ others; please specify
_____

20. Did you collect pre-post data regarding clinician knowledge or attitudes?

_____ yes (1) _____ no (0)

21. If yes would you be willing to discuss the data at a symposium at APS in Washington, DC in 1996?

_____ yes (1) _____ no (0)

22. Have the data shown improvement, no change, or worsening in any of the following areas? (Check one column for each topic.)

	improvement	no change	worsening	not assessed
clinician knowledge/attitudes	_____	_____	_____	_____
consistency in documentation	_____	_____	_____	_____
awareness of resources	_____	_____	_____	_____
use of appropriate analgesic doses	_____	_____	_____	_____

23. How long has the formal process of improving pain management been going on at your institution/agency/caresetting?

_____ (answer in months)

24. How long have *you personally* been involved in the formal process at your institution/agency/caresetting?

_____ (answer in months)

25. What is *your* discipline?

_____ chaplain (1)
_____ nursing (3)
_____ psychology (5)
_____ medicine (2)
_____ social work (4)
_____ other; please specify

26. Are there any other comments about QA/I efforts that we haven't asked about?

THANK YOU for the time and the thought you put into helping us determine the extent to which we are implementing the APS QA/I standards.

We look forward to sharing the results of this survey at our next APS meeting.
Please return this questionnaire in the enclosed envelope to:

Sandra Ward, PhD RN
UW-Madison, School of Nursing
600 Highland Ave. K6/348
Madison, WI 53792